

**CSE 5325 – Software Project Management
Spring 2019 - Cost Estimation
Assignment #2**

Objective: Project Cost Estimation using COCOMO

Due: Thursday March 21, 2019; 5:00 PM

Grading: 10% of your Course grade

Submission via: Black Board (<https://elearn.uta.edu/>) – Assignment 02

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GTA E-mail is only for asking questions but not submission of assignment. Submission will be via blackboard.

Deliverable:

A detailed report estimating your project cost using COCOMO II. The report should be at least 6 pages long and must include all the COCOMO's Scale drivers (5) and Cost drivers (17), the value allocated to each and the rationale behind selecting these numbers. There are many free and none-for-profit COCOMO websites such as Costar: <http://www.softstarsystems.com/>

Your report must include a title, a quick executive summary, your cost structure, conclusion and reference.

Points to Consider:

Select the same project you used in Assignment# 1, consider the following points, and use any online COCOMO tool to complete your cost estimation report (i.e. you are estimating how long it takes to complete your project using this COCOMO tool). You can make reasonable assumptions along the way assuming they are not farfetched:

- Assume you have 5 developers to complete all your tasks, excluding yourself, remember you are the manager and in charge of scheduling and estimation
- Each developer can be used in any capacity (i.e. develop screens, draw UML diagrams and come up with requirements, database design, do documentation, write test plans, anything that you asked them to do since you are the manager)
 1. Assume the project start date is Feb. 18, 2019
 2. Project must be delivered before May 18, 2019
 3. Please add appropriate hardware/software cost as you need for your project (e.g. servers, databases, etc.). Search the web to find reasonable prices for your required items.
 4. Cost: Assume, each resource will cost you \$50/hour; your salary is \$100/hour, and 50% extra surge for health insurance, office cost, building and utility cost, etc.
 5. You need to have at least 50% profit margin in this project (e.g. if it costed you \$200K to develop, charge the customer \$300k)
- All tasks and activities that were entered in Assignment 1 via “Microsoft Project Professional 2016” must be accounted for in this COCOMO exercise. You can modify the tasks submitted in assignment #1 if you wish.
- All cycles of development (i.e. Requirements, Design, Development, Testing) and documentation (i.e. user manual) must be accounted for
- You could use any testing framework such as generating test cases or using JUnit for testing portion of this project. Make sure to include the cost of the testing tool if you decide to use one.
- Include the cost of any capital expenditure (i.e. software, hardware, network, database, etc.) that you need to purchase. Search the web to find reasonable prices for your required items
- Extensive risk analysis and mitigation should be included
- Configuration management for source code and other product artifacts (e.g. requirements, documentation, source code) storage is required
- Security (i.e. data encryption/decryption) is required to maintain integrity of your data. Make sure to include the cost of security software packages
- Feel free to make reasonable assumptions if necessary, just document and submit it
- Explain any value you use for Scale drivers and Cost factors
- Your report must be at least 6 pages long, Fonts 11, single space and include references
- 10% penalty per each day of being late after the due date/time.
- Bonus: 5 extra points for the best submitted assignment
- The delivery will be made of the text report plus the COCOMO cst estimate file. Please do not zip and use Surname_Name_COCOMO as the naming standard for the report file.